REMARKS

On page 2 of his office action, the Examiner rejected claims 3 through 6 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,687,232 to Zimmerman.

As pointed out in applicant's specifications, the present invention provides a fitting which allows a plumber to construct a plumbing system without the bulky joint resulting from the current method, which requires two fittings (a pipe coupling and an insert) with three glue joints, in order to reduce the size of PVC pipes.

The Zimmerman reference cited by the Examiner discloses a pipe slip joint system which is used to repair plumbing systems, coupling two pieces of pipe of identical diameter. As previously argued by applicant, Zimmerman does not disclose "a unitary pipe bushing (**38**) for use in joining a first length of pipe to a second length of pipe. . . ." Instead, the reducer bushing **38** of Zimmerman fits into the bushing socket **18** of the joint housing **12** of a slip joint **10**, it provides a piston block **49**, which limits the inward travel of the piston section **26** of the piston pipe **24**, consequently limiting the collapse of the slip joint **10** (col. 4, ll. 35-68 through col. 5, l. 1). "The reducer bushing **38** of Zimmerman has a two-stage axial bore **44** which defines a pipe socket **46** [with a bore sized the same as the outer diameter of the pipe to be mended] and a radially reduced bore **48** of substantially the same internal diameter as that of the piping to be joined or mended by the slip joint **10**." (col. 4, ll. 41-45). Further, the end of the reducer bushing **38** is designed to rest against a bushing seat **19** on the axial bore of the slip joint **10**. (col. 4, ll. 50-56). Its hexagonal grip **40** is probably used for handling the reducer bushing **38**.

The present invention, on the other hand, is specifically designed to couple two

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PAGE 5/8 * RCVD AT 8/19/2005 5:14:53 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-6/25 * DNIS:2738300 * CSID:2813634066 * DURATION (mm-ss):01-52

pipes having different diameters, and the dimensions are reflected in the claims. Further, the present invention claims a single-stage bore of uniform diameter. The inwardly projecting lip of the present invention does not constitute the radially reduced bore of Zimmerman's two-stage axial bore. Further, it would not be "obvious" to fabricate the body of Zimmerman's pipe bushing "with an outer diameter up to 0.05 inches smaller than the inner diameter of the second length of pipe, and with a bore having a uniform diameter up to 0.05 inches larger than the outer diameter of the first length of pipe. . . .", as the Examiner suggests. In fact, it would be impossible to fabricate such a pipe bushing for joining two lengths of pipes having the same diameter (the body of the pipe bushing could not have an outer diameter up to 0.05 inches smaller than the inner diameter of the lengths of pipe with identical diameters).

Finally, modifying Zimmerman's pipe bushing to have a single-stage, uniform bore, as claimed in the present invention, would render it unsatisfactory for its intended purpose; therefore there is no suggestion or motivation to make such a modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed Cir. 1984). More specifically, if Zimmerman's pipe bushing did not have a second stage axial bore, the bushing seat **19** of the slip joint **10** would push against the narrowed bottom of the pipe bushing **38**, and the wall of the pipe inserted into the pipe socket **46** will push against the protruding edge of the shortened "second stage" bore; the opposing forces are likely to cause the bushing to fail. (Also, the length of the second stage bore helps limit the collapse of the slip joint **10**.)

In any event, in reviewing the Examiner's rejection of claims 3 through 6, applicant has amended claim 3 to more clearly claim the subject matter of the present invention,

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PAGE 6/8 * RCVD AT 8/19/2005 5:14:53 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-6/25 * DNIS:2738300 * CSID:2813634066 * DURATION (mm-ss):01-52

including its use for joining two lengths of pipe with different diameters. Claim 3, as amended, is not made obvious by Zimmerman. As noted previously, Zimmerman does not disclose a unitary bushing having an outwardly projecting round flange with a lateral thickness equal to the wall thickness of the second length of pipe. Further, Zimmerman does not disclose a bushing having an inwardly-projecting lip with a lateral thickness equal to the wall thickness of the first length of pipe. Further, Zimmerman does not disclose a bushing with a single-stage bore having a uniform diameter up to .05 inches larger than the outer diameter of the first length of pipe. Instead Zimmerman discloses a bushing having a two-stage axial bore; each stage has a different diameter. Further, Zimmerman's bushing does not have a bottom end terminating with an inwardly-projecting lip. Finally, the modifications suggested by the Examiner are either impossible or unsatisfactory. Claim 3, as amended, should be allowable over Zimmerman. Claim 4, which depends from amended claim 3, should also be allowable.

On page 4 of the office action, the Examiner rejected claims 5 and 6 under 35 U.S.C. §103(a) as being unpatentable over Zimmerman, saying it discloses the claimed invention except for a method of reducing drain, waste and vent pipes, citing principles of inherency. Applicant has amended claim 5 to clearly show the method is used to couple pipes having different diameters. As amended, claim 5 should be allowable over Zimmerman. The device disclosed in Zimmerman, is not the same device described in applicant's specifications for carrying out the claimed method, for the reasons stated *supra*. Claim 6, which depends on claim 5, should be allowable as well.

With regard to the Examiner's Response to Argument beginning on page 4, the

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Examiner has indicated that the comment (that the inwardly projecting lip is not recited in the rejected claims) is moot.

In light of the foregoing arguments, and upon entry of the amendments, allowance of claims 3 through 6 should be in order, and is respectfully requested.

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Respectfully submitted,

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PAGE 8/8 * RCVD AT 8/19/2005 5:14:53 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-6/25 * DNIS:2738300 * CSID:2813634066 * DURATION (mm-ss):01-52